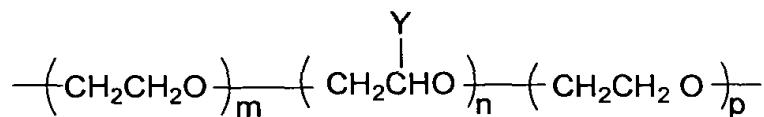


with a manner of linkage therebetween being

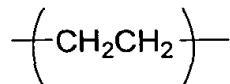


wherein m, n, and p represent integers greater than or equal to 1, and a weight ratio calculated on the basis of each recurrence number m, n, and p predetermined to be: 44 x (m+p)/(molecular weight of the unit of the alkylene oxide having more than or equal to four carbon atoms) x n 94/6 to 80/20,

and the weight ratio calculated on the basis of each recurrence number m and p, p/(m+p) is predetermined to be more than or equal to 50 percent by weight;

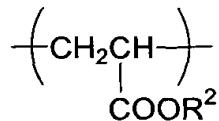
Y represents a hydrocarbon group having two or more carbon atoms; X¹ represents a residue of an organic compound having two active hydrogen groups; and R¹ represents a residue of a dicarboxylic acid compound;

and (b) a cationic polymer compound having a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



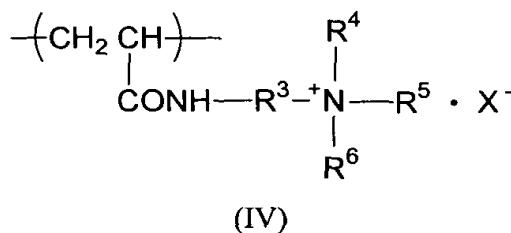
(II)

less than or equal to 15 mol% of an acrylate structural unit represented by formula (III)



wherein R² represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (IV)

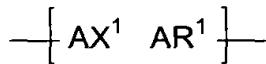
B1
cont.



wherein R^3 represents an alkylene group having 2 to 8 carbon atoms, R^4 and R^5 , respectively, represent an alkyl group having 1 to 4 carbon atoms, R^6 represents an alkyl group having 1 to 12 carbon atoms, an aryl alkyl group having 7 to 12 carbon atoms, or an alicyclic alkyl group having 6 to 12 carbon atoms, and X^- represents a halogen ion, $\text{CH}_3\text{OSO}_3^-$, or $\text{C}_2\text{H}_5\text{OSO}_3^-$.

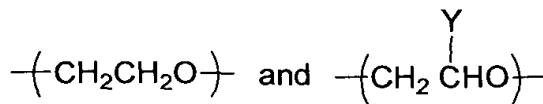
B2

12. A resin composition for ink jet recording comprising (a) a major component of a water-absorbing polymer compound having a weight average molecular weight ranging between 10,000 and 300,000 represented by the formula (I),

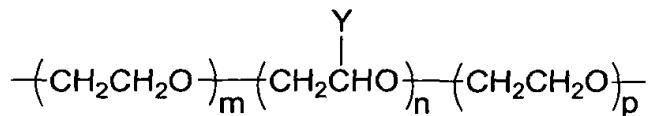


(I)

wherein A consists of



with a manner of linkage therebetween being



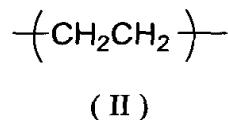
wherein m, n, and p represent integers greater than or equal to 1, and a weight ratio calculated on the basis of each recurrence number m, n, and p predetermined to be: $44 \times (m+p) / (\text{molecular weight of the unit of the alkylene oxide having more than or equal to four carbon atoms}) \times n = 94/6$ to 80/20,

and the weight ratio calculated on the basis of each recurrence number m and p, $p/(m+p)$ is predetermined to be more than or equal to 50 percent by weight;

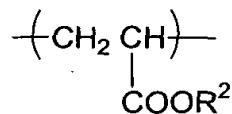
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cont.*

Y represents a hydrocarbon group having two or more carbon atoms; X¹ represents a residue of an organic compound having two active hydrogen groups; and R¹ represents a residue of a dicarboxylic acid compound;

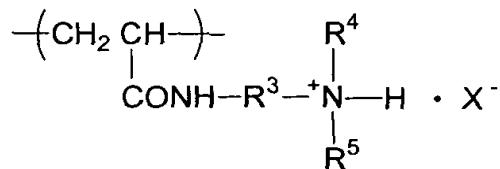
and (b) a cationic polymer compound having a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



less than or equal to 15 mol% of an acrylate structural unit represented by formula (III),



wherein R² represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (V) ,



(V)

13. The resin composition of claim 10 wherein a mixing ratio by weight of the water-absorbing polymer compound (a) and the cationic polymer compound (b) is between 50/50 and 99/1.

14. The resin composition of claim 10 further comprising (c) a cationic or nonionic surface active agent.

15. The resin composition of claim 14 wherein an amount. of the cationic or nonionic surface active agent (c) is from 1% by weight to 10% by weight.

B3

16. (Amended) An ink jet recording sheet comprising a substrate layer and an ink-receiving layer that is overlaid said substrate layer, wherein said ink-receiving layer comprises the resin composition according to any of claims 10.

17. A method of ink jet recording using an ink jet recording sheet according of claim 16, comprising the step of adsorbing small droplets of a water-based color ink applied to the ink-receiving layer.

B4

18. (Amended) A method of producing an ink jet recording sheet comprising the steps of extruding a resin composition that constitutes a substrate layer into a sheet form, while extruding a resin composition for ink jet recording sheet according to claim 10 into a sheet form concurrently with the substrate layer, and forming layers from both of said resin compositions.

ADD new claims 19-38, as follows:

B5

19. The resin composition of claim 12 wherein a mixing ratio by weight of the water-absorbing polymer compound (a) and the cationic polymer compound (b) is between 50/50 and 99/1.

20. The resin composition of claim 12 further comprising (c) a cationic or nonionic surface active agent.

21. The resin composition of claim 20 wherein an amount. of the cationic or nonionic surface active agent (c) is from 1% by weight to 10% by weight.

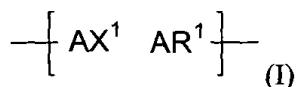
22. An ink jet recording sheet comprising a substrate layer and an ink-receiving layer that is over-laid said substrate layer, wherein said ink-receiving layer comprises the resin composition according to claim 12.

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cont.

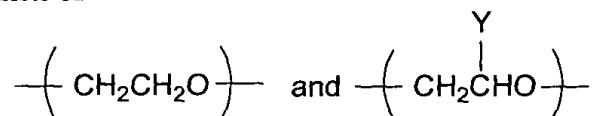
23. A method of ink jet recording using an ink jet recording sheet according of claim 22, comprising the step of adsorbing small droplets of a water-based color ink applied to the ink-receiving layer.

24. A method of producing an ink jet recording sheet comprising the steps of extruding a resin composition that constitutes a substrate layer into a sheet form, while extruding a resin composition for ink jet recording sheet according to claim 12 into a sheet form concurrently with the substrate layer, and forming layers from both of said resin compositions.

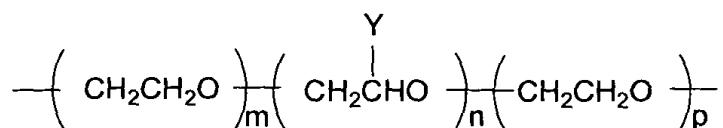
25. An ink jet recording sheet comprising a substrate layer and an ink-receiving layer that is overlaid onto said substrate layer, wherein said ink-receiving layer comprises (a) a major component of a water-absorbing polymer compound represented by the formula (I),



wherein A consists of



with a manner of linkage therebetween being



wherein m, n, and p represent integers greater than or equal to 1, and a weight ratio calculated on the basis of each recurrence number m, n, and p predetermined to be: $44 \times (m+p) / (\text{molecular weight of the unit of the alkylene oxide having more than or equal to four carbon atoms}) \times n = 94/6$ to $80/20$,

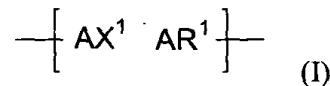
and the weight ratio calculated on the basis of each recurrence number m and p, $p/(m+p)$ is predetermined to be more than or equal to 50 percent by weight;

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cont.

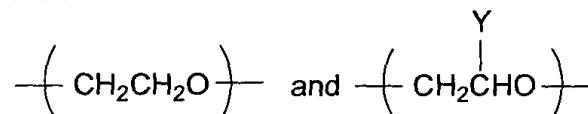
Y represents a hydrocarbon group having two or more carbon atoms; X¹ represents a residue of an organic compound having two active hydrogen groups; and R¹ represents a residue of a dicarboxylic acid compound;

and (b) a cationic polymer compound.

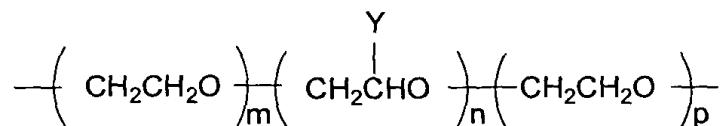
26. A method of producing an ink jet recording sheet comprising the steps of extruding a resin composition that constitutes a substrate layer into a sheet form, extruding a resin composition layer for ink jet recording into a sheet form, and overlaying the ink jet recording layer onto the substrate layer, wherein the ink jet recording layer comprises, (a) a major component of a water-absorbing polymer compound represented by the formula (I),



wherein A consists of



with a manner of linkage therebetween being



wherein m, n, and p represent integers greater than or equal to 1, and a weight ratio calculated on the basis of each recurrence number m, n, and p predetermined to be: 44 × (m+p)/(molecular weight of the unit of the alkylene oxide having more than or equal to four carbon atoms) × n = 94/6 to 80/20,

and the weight ratio calculated on the basis of each recurrence number m and p, p/(m+p) is predetermined to be more than or equal to 50 percent by weight;

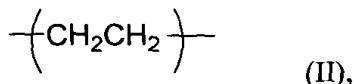
Y represents a hydrocarbon group having two or more carbon atoms; X¹ represents a residue of an organic compound having two active hydrogen groups; and R¹ represents a residue of a dicarboxylic acid compound;

and (b) a cationic polymer compound.

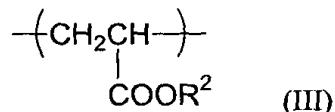
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27. The method of claim 26, wherein the substrate layer and the ink jet recording sheet are extruded concurrently while overlaying the ink jet recording layer onto the substrate layer.

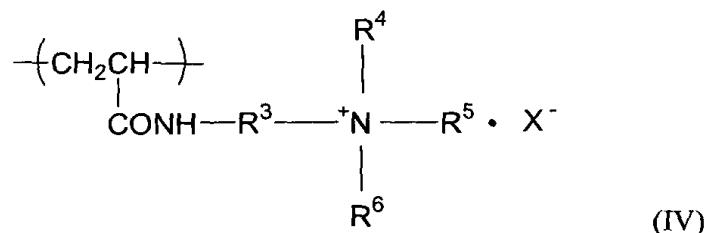
28. The ink jet recording sheet of claim 25, wherein the cationic polymer (b) has a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



less than or equal to 15 mol% of an acrylate structural unit represented by formula (III),



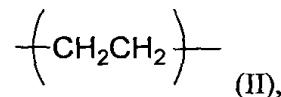
wherein R^2 represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (IV),



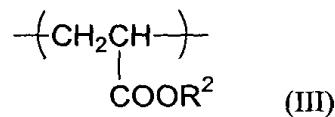
wherein R^3 represents an alkylene group having 2 to 8 carbon atoms, R^4 and R^5 , respectively, represent an alkyl group having 1 to 4 carbon atoms, R^6 represents an alkyl group having 1 to 12 carbon atoms, an aryl alkyl group having 7 to 12 carbon atoms, or an alicyclic alkyl group having 6 to 12 carbon atoms, and X^- represents a halogen ion, $\text{CH}_3\text{OSO}_3^-$, or $\text{C}_2\text{H}_5\text{OSO}_3^-$.

*B5
cont.*

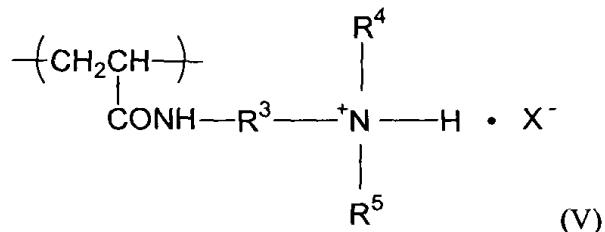
29. The ink jet recording sheet of claim 25, wherein the cationic polymer (b) has a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



less than or equal to 15 mol% of an acrylate structural unit represented by formula (III),



wherein R^2 represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (V):



wherein R^3 represents an alkylene group having 2 to 8 carbon atoms, R^4 and R^5 , respectively, represent an alkyl group having 1 to 4 carbon atoms, and X^- represents a halogen ion, $\text{CH}_3\text{OSO}_3^-$ or $\text{C}_2\text{H}_5\text{OSO}_3^-$.

30. The ink jet recording sheet of claim 25 wherein a mixing ratio by weight of the water-absorbing polymer compound (a) and the cationic polymer compound (b) is between 50/50 and 99/1.

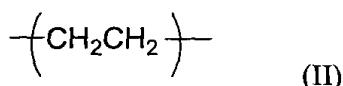
31. The ink jet recording sheet of claim 25 further comprising (c) a cationic or nonionic surface active agent.

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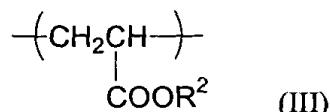
32. The ink jet recording sheet of claim 31 wherein an amount of the cationic or nonionic surface active agent (c) is from 1% by weight to 10% by weight.

33. A method in accordance with claim 26, wherein the water absorbing polymer compound (a) has a weight average molecular weight ranging between 10,000 and 300,000.

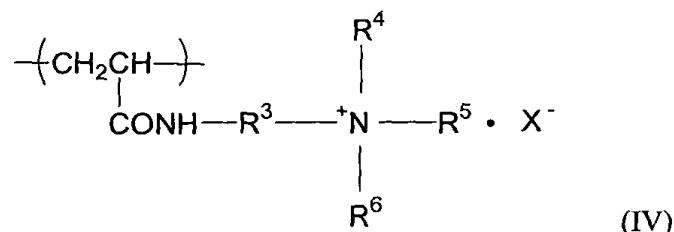
34. A method in accordance with claim 26, wherein the cationic polymer (b) has a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



less than or equal to 15 mol% of an acrylate structural unit represented by formula (III),



wherein R² represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (IV),



wherein R³ represents an alkylene group having 2 to 8 carbon atoms, R⁴ and R⁵, respectively, represent an alkyl group having 1 to 4 carbon atoms, R⁶ represents an alkyl group having 1 to 12 carbon atoms, an aryl alkyl group having 7 to 12 carbon atoms, or an alicyclic alkyl group having 6 to 12 carbon atoms, and X⁻ represents a halogen ion, CH₃OSO₃⁻, or C₂H₅OSO₃⁻.